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7590 12/10/2008
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| EXAMINER |
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CASCA, FRED A

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2617

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12/10/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/018,589 | Applicant(s) ZSCHINTZSCH, HANS | |
| | Examiner FRED A. CASCA | Art Unit 2617 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed September 16, 2008 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 12-14, 18-19, 23-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mukherjee et al (US Patent Number 6,289,223) in view of Pecan et al (US 6,493,559 B1).

Regarding claim 26, Mukherjee et al. discloses a method of providing a cellular broadcast center with a cellular broadcast message (column 2, lines 1-4, 10-13 & 32-36; column 1, line 48; title), comprising:

receiving a short message (column 2, line 45; column 3, line 65; column 4, line 60) from a short message center (SMS-IWMSC 16); (see column 3, lines 5-14); converting the short

Art Unit: 2617

message into a cellular broadcast message ("an originating mobile unit may then transmit an SMS message to a plurality of destination units by transmitting an SMS message addressed to a predefined usergroup MSISDN" - abstract: therefore, the SMS message is translated into cellular broadcast message as claimed; see also column 2, lines 10-21 & 24-26; column 4, lines 3-6; column 7, lines 4-6); forwarding the cellular broadcast message to a cellular broadcast center by means of a process that applies to the cell broadcast center such that the cellular broadcast message is broadcast to subscriber within a defined area of cell broadcast center (column 3, lines 17-20, SMS-GMSC 20).

Mukherjee does not specifically disclose wherein in the forwarding step, the cellular broadcast center is not capable of broadcasting the cellular broadcast message to fewer than all of the subscribers within the defined area of the cell broadcast center, as claimed.

Pecen discloses a method of receiving SMS where permits the broadcast of unacknowledged messages to all receivers (col. 1, lines 23-50, "permits the broadcast of unacknowledged messages to all receivers within a specific geographical region". Note that the Pecan's cellular system is capable of broadcasting to all subscribers, thus at that instant it is not capable of broadcasting to fewer than all subscribers). An advantage of broadcasting to all receivers is in case of in emergency where a message needs to be transmitted to all receivers.

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the method of Mukherjee by incorporating the teachings of Pecan in the format claimed by applicant, for the purpose of ensuring transmitting of emergency messages to all members.

Regarding claim 27, the combination of Mukherjee/Pecen discloses everything claimed as applied above (see claim 26). In addition, Mukherjee et al. discloses wherein the cellular broadcast center delivers the cellular broadcast message to all subscribers (usergroup) in communication with a mobile station associated with the cellular broadcast center (comparing and selecting multipoint usergroup) (see abstract; column 3, lines 20-25; column 4, line 59 to column 5, line 5).

Regarding claim 28, the combination of Mukherjee/Pecen discloses everything claimed as applied above (see claim 26). In addition, Mukherjee et al. discloses wherein converting includes performing authentication of a subscriber associated with the short message (determining origination authentication - see column 3, lines 20-25; column 4, line 59 to column 5, line 5).

Regarding claim 29, the combination of Mukherjee/Pecen discloses everything claimed as applied above (see claim 26). In addition, Mukherjee et al. discloses wherein the forwarding is performed through a process valid for transmitting cellular broadcast messages (column 3, lines 17-20: "forwarding", as taught by Mukherjee et al., is in fact a process. The process/forwarding is fairly characterized as "valid").

Regarding claim 30, the combination of Mukherjee/Pecen discloses everything claimed as applied above (see claim 26). In addition, Mukherjee et al. discloses wherein converting includes formatting the short message ("an originating mobile unit may then transmit an SMS message to a plurality of destination units by transmitting an SMS message addressed to a predefined usergroup MSISDN" - abstract: therefore, the SMS message is translated or formatted; see also column 2, lines 10-21 & 24-26; column 4, lines 3-6; column 7, lines 4-6).

Regarding claim 31, the combination of Mukherjee/Pecen discloses everything claimed as applied above (see claim 26). In addition, Mukherjee et al. discloses wherein the converting includes using a part of the short message to determine a routing instruction (SMS message is encapsulated with MSISDN of destination users, which is routing information/instruction - column 6, lines 30-53; particularly lines 40-45; also see column 3, line 15) (message is addressed to group: i.e. used to determine routing instruction. See abstract; column 2, lines 10-21 & 24-26; column 4, lines 3-6; column 7, lines 4-6).

Regarding claim 12, Mukherjee et al discloses a process of allowing direct access for individual subscribers to a cellular phone network (Figure 1) with existing cell broadcast services (column 2, lines 1-4, 10-13 & 32-36; column 1, line 48; title), the process comprising accepting a point-to-point short message from a cellular phone (12) equipped to exchange point-to-point short messages (column 2, line 45; column 3, line 65; column 4, line 60) with a short-message center (SMS-IW MSC 16) over a cellular phone network (10 - Figure 1), (see column 3, lines 5-14);

providing a coupling instance (SC 18) interconnectable with the short-message center (SMS-IW MSC 16); (see column 3, lines 15-20);

doing at least one of: a test (determines destination / subscriber status), an adjustment (parses the messages) and a conversion (deciphers the messages) of the point-to-point short message necessary to convert the point-to-point short message into a cellular broadcast message in the

Art Unit: 2617

coupling instance (SC 18) (see column 3, lines 20-25; column 4, line 59 to column 5, line 5); ["an originating mobile unit may then transmit an SMS message to a plurality of destination units by transmitting an SMS message addressed to a predefined usergroup MSISDN" - abstract: therefore, the SMS message is translated into cellular broadcast message as claimed; see also column 2, lines 10-21 & 24-26; column 4, lines 3-6; column 7, lines 4-6]; and forwarding the cellular broadcast message to a cell broadcast center (SMS-GMSC 20) by means of a process (e.g. forwarding) that applies to the cell broadcast center (see column 3, lines 17-20); [Forwarding, as taught by Mukherjee et al., is in fact a process. Thus the limitation "by means of a process that applies to the cell broadcast center" is inherent, since such process is needed for the system to operate, and it has to be applicable to the cell broadcast center because it is the one receiving the forwarded messages], the cellular broadcast message is broadcasted to subscribers within a defined area of the cell broadcast center as claimed.

However, Mukherjee et al. fails particularly disclose that the network is a digital cellular phone network in the invention embodiment, as claimed.

In the background of the invention, Mukherjee et al. teaches several different digital- based telecommunications systems, such as GSM and PCS, that provide non-speech services to mobile subscribers, such as short message services (see column 1, lines 30-40). Consequently, Mukherjee et al. suggests to apply their improved SMS service in a digital cellular phone network, such as GSM.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to implement Mukherjee et al.'s short message method in a digital cellular

phone network because digital-based standards, like GSM, are widely used; hence, an increased number of users can benefit from the service.

Mukherjee does not specifically disclose cell broadcast center but is not capable of being broadcast to fewer than all of subscribers within defined area of the cell broadcasts center , as claimed.

Pecen discloses a method of receiving SMS where permits the broadcast of unacknowledged messages to all receivers (col. 1, lines 23-50, "permits the broadcast of unacknowledged messages to all receivers within a specific geographical region". Note that the Pecan's cellular system is capable of broadcasting to all subscribers, thus at that instant it is not capable of broadcasting to fewer than all subscribers). An advantage of broadcasting to all receivers is in case of in emergency where a message needs to be transmitted to all receivers.

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the method of Mukherjee by incorporating the teachings of Pecan in the format claimed by applicant, for the purpose of ensuring transmitting of emergency messages to all members.

Regarding claim 13, the combination of Mukherjee/Pecan discloses everything claimed as applied above (see claim 12). In addition, Mukherjee et al. discloses wherein a parameter (group identifier or usergroup MSISDN) for using cell broadcast is given by the subscriber (user) in the point-to-point short message (the user enters the group identifier when initiating the SMS transmission - column 2, lines 13-21 & 24-27; column 3, lines 55-56).

Regarding claim 14, the combination of Mukherjee/Pecen discloses everything claimed as applied above (see claim 12) In addition, Mukherjee et al. discloses wherein a parameter for using cell broadcast is predetermined (beforehand / prior arrangements - column 4, lines 49-53) and are added to the broadcast message by the coupling instance (SC 18) (column 3, lines 20-25; column 4, line 67 to column 5, line 2).

Regarding claim 18, the combination of Mukherjee/Pecen discloses a device for allowing direct access for individual subscribers to a cellular phone network (Figure 1) with existing cell broadcast services (column 2, lines 1-4, 10-13 & 32-36; column 1, line 48; title), wherein the cellular phones (12) of the subscribers (users) are equipped to exchange point-to-point short messages (column 2, line 45; column 3, line 65; column 4, line 60) with a short-message center (SMS-IWMSC 16) over the cellular phone network (10 - Figure 1), (see column 3, lines 5-14), whereby short messages declared cell broadcast messages ("an originating mobile unit may then transmit an SMS message to a plurality of destination units by transmitting an SMS message addressed to a predefined usergroup MSISDN" - abstract; column 2, lines 10-21 & 24-26; column 4, lines 3-6; column 7, lines 4-6) are forwarded to a cell broadcast center (SMS-GMSC 20), (see column 3, lines 15-20). The cellular broadcast message is broadcasted to subscribers within a defined area of the cell broadcast center as claimed (because it can only be received by subscribers within a range of the broadcast cell tower), the device comprising:

a coupling instance (SC 18) connected to a short message center (SMS-IWMSC 16), which accepts (column 3, lines 14-16; see also Figure 1) point-to-point short message (column 2, line 45; column 3, line 65; column 4, line 60); and means of doing (inherent) at least one of: a test (for determining destination and subscriber status), an adjustment (for parsing the messages),

Art Unit: 2617

and a conversion (for deciphering the messages) of the point-to-point short message necessary to convert the point-to-point short message into a cellular broadcast message (see column 3, lines 20-25; column 4, line 59 to column 5, line 5) ("means of doing" inherent from the explained function) ["an originating mobile unit may then transmit an SMS message to a plurality of destination units by transmitting an SMS message addressed to a predefined usergroup MSISDN" - abstract: therefore, the SMS message is translated into cellular broadcast message as claimed; see also column 2, lines 10-21 & 24-26; col. 4, lines 3-6; column 7, lines 4-6]; wherein the coupling instance (SC 18) is connected to a cell broadcast center (SMS- GMSC 20) to which the converted message is forwarded (see column 3, lines 17-20).

However, Mukherjee et al. fails particularly disclose that the network is a digital cellular phone network, as claimed.

In the background of the invention, Mukherjee et al. teaches several different digital-based telecommunications systems, such as GSM and PCS, that provide non-speech services to mobile subscribers, such as short message services (see column 1, lines 30-40). Consequently, Mukherjee et al. suggests to apply their improved SMS service in a digital cellular phone network, such as GSM.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to implement Mukherjee et al.'s short message method in a digital cellular phone network because digital-based standards, like GSM, are widely used; hence, an increased number of users can benefit from the service.

Art Unit: 2617

Mukherjee does not specifically disclose wherein in the forwarding step, the cellular broadcast center is not capable of broadcasting the cellular broadcast message to fewer than all of the subscribers within the defined area of the cell broadcast center, as claimed.

Pecen discloses a method of receiving SMS where permits the broadcast of unacknowledged messages to all receivers (col. 1, lines 23-50, "permits the broadcast of unacknowledged messages to all receivers within a specific geographical region". Note that the Pecan's cellular system is capable of broadcasting to all subscribers, thus at that instant it is not capable of broadcasting to fewer than all subscribers). An advantage of broadcasting to all receivers is in case of in emergency where a message needs to be transmitted to all receivers.

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the method of Mukherjee by incorporating the teachings of Pecan in the format claimed by applicant, for the purpose of ensuring transmitting of emergency messages to all members.

Regarding claim 19, the combination of Mukherjee/Pecan discloses everything claimed as applied above (see claim 18). In addition, Mukherjee et al. discloses wherein the point-to-point short messages contain parameters (group identifier or usergroup MSISDN) for defining the broadcast area (see column 2, lines 13-21 & 24-27; column 3, lines 55-56) and, if necessary, other parameters (for example, origination related data, etc. - column 3, lines 21-24).

Regarding claim 21/18 and 21/19/18, Mukherjee et al. discloses everything claimed as applied above (see claim 18-19). In addition, Mukherjee et al. discloses wherein a filter component (for

Art Unit: 2617

comparing and selecting multipoint usergroup) is provided in the coupling instance (SC 18) (see column 3, lines 20-25; column 4, line 59 to column 5, line 5)

("component" is inherent from the respective explained functions).

Regarding claim 23, the combination of Mukherjee/Pecen discloses everything claimed as applied above (see claim 12). In addition, Mukherjee et al. discloses filtering (comparing and selecting multipoint usergroup) the point-to-point short message based on a subscriber associated with the cellular phone (see column 3, lines 20-25; column 4, line 59 to column 5, line 5).

Regarding claims 24-25, Mukherjee et al. discloses everything claimed as applied above (see claims 12 and 18). In addition, Mukherjee et al. discloses wherein the point-to-point short message is declared as an intended cellular broadcast message by a subscriber associated with the cellular phone ("an originating mobile unit may then transmit an SMS message to a plurality of destination units by transmitting an SMS message addressed to a predefined usergroup MSISDN" - abstract; column 2, lines 10-21 & 24-26; column 4, lines 3-6; column 7, lines 4-6).

Further, claims 24-25 include a recitation of intended use. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

4. Claims 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mukherjee et al. (US Patent Number 6,289,223) in view of Pecan et al (US 6,493,559 B1) and further in view of Sikand et al. (US Patent Number 5,515,421).

Regarding claims 15, the combination of Mukherjee/Pecen discloses everything claimed as applied above (see claims 12-14). However, Mukherjee et al. fails to specifically disclose that the area to which the cellular broadcast message applies is determined by giving the dialing prefix, the postal code or the vehicle license number, as claimed.

Sikand et al. discloses a message broadcasting method wherein callers (area to which the broadcast message applies) are identified according to a one or more common defined characteristics, such as, area code (dialing prefix), zip code (postal code), or any other caller characteristics or codes (for example, vehicle license number) (see column 1, lines 50-54 & 61-67). For example, if the broadcast message is local weather the caller identification would be the zip code (postal code) (column 2, lines 1-3, and column 3, lines 1-5).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to determine the area to which the cellular broadcast message applies by using a dialing prefix, a postal code or a vehicle license number, because the information can be, for example, geographically dependent, such as local weather, in which case the information is pertinent for a particular zip code group, as taught by Sikand.

5. Claims 16, 17, 20, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mukherjee et al. (US Patent Number 6,289,223) in view of Pecan et al (US 6,493,559 B1) and further in view of Vedel (US Patent Number 5,974,308).

Regarding claims 20 and 22, the combination of Mukherjee/Pecen discloses everything claimed as applied above (see claims 18-19). However, Mukherjee et al. fails to specifically disclose an accounting instance / billing entity provided in the coupling instance, as claimed.

Vedel discloses message broadcasting apparatus wherein accounting instance / billing entity provided for the purpose of informing users a rate of charge (see abstract; column 3, lines 15-35 of Vedel). Since the coupling instance (SC 18 of Mukherjee et al.) performs most of the short-message service processing (column 3, lines 20-24; column 4, lines 53 and 67 to column 5, line 10, inter alia, of Mukherjee et al), it would have been obvious to also perform the needed accounting / billing process since its location is not critical, as it can be seen from Vedel. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide Mukherjee et al.'s device with an accounting instance / billing entity provided in the coupling instance, because, first, it is needed for the purpose of selling the broadcast services, and, second, it can be used to inform users a rate of charge, as taught by Vedel.

Regarding claims 21, the combination of Mukherjee/Pecen discloses everything claimed as applied above (see claims 12-14). However, Mukherjee et al. fails to specifically disclose a filter component as claimed. However, provision of these filtering is obvious expedient in view of Vedel as explained for claims 20 and 22 above, explanation that is applied and incorporated herein by reference.

Regarding claims 16 and 17, the combination of Mukherjee/Pecen discloses everything claimed as applied above (see claims 12-14). However, Mukherjee et al. fails to specifically disclose an accounting methods as claimed. However, provision of these accounting methods is obvious expedient in view of Vedel as explained for claims 20 and 22 above, explanation that is applied and incorporated herein by reference.

Response to Arguments

6. Applicant's arguments with respect to claims 12-31 have been considered but they are not persuasive.

In response to arguments that the two references explicitly teach away from one another, the examiner respectfully disagrees and asserts that there are advantages to both modes of transmission. The advantages of broadcast transmission are, among other things, to make sure all subscribers are reached within the radio range and eliminating extra processing of classifying subscribers. Thus, it would be appropriate to use the broadcast transmission mode in certain situation when the broadcast transmission would serve subscribers better, especially when there is need to reach all subscribers, e.g., in case of emergencies. Further, there certainly will be situations that broadcast transmission would be more useful than any non-broadcast transmission system. Further, Mukherjee does not say that broadcast transmission is inappropriate and should be avoided at all times. Mukherjee is simply focusing more on the non-broadcast transmission mode. Thus, the references are not teaching from one another and combining Mukherjee with Pecen is rational to one of the ordinary skill in the art.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, as mentioned above, there are advantages to both modes of transmission. The

Art Unit: 2617

advantages of broadcast transmission are, among other things, to make sure all subscribers are reached within the radio range and eliminating extra processing of classifying subscribers. Thus, it would be appropriate to use the broadcast transmission mode in certain situation when the broadcast transmission would serve subscribers better, especially when there is need to reach all subscribers, e.g., in case of emergencies. Thus combining Mukherjee with Pecan is rational to one of the ordinary skill in the art.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred A. Casca whose telephone number is (571) 272-7918. The examiner can normally be reached on Monday through Friday from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Harper, can be reached at (571) 272-7605. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/VINCENT P. HARPER/

Supervisory Patent Examiner, Art Unit 2617